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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television

MM Docket No. 00-39

NOTICE OF PROPOSED RULE MAKING

Adopted: March 6, 2000

Released: March 8, 2000

Comment date: May 17, 2000

Reply Comment date: June 16, 2000

By the Commission:

I. Introduction

1. With this *Notice of Proposed Rule Making*, we commence our first periodic review of the progress of the conversion of our nation's television system from analog technology to digital television ("DTV"). In the *Fifth Report and Order* in MM Docket No. 87-268,¹ we stated that we would conduct a review every two years to "ensure that the introduction of digital television and the recovery of spectrum at the end of the transition fully serves the public interest."² For the most part, this conversion is progressing, and television stations are working hard to convert to digital television pursuant to the

12 FCC Rcd 12809 (1997) ("*Fifth Report and Order*"), on recon., *Memorandum Opinion and Order on Reconsideration of the Fifth Report and Order*, 13 FCC Rcd 6860 ("*Fifth MO&O*"), on further recon., *Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders*, FCC 98-315, 14 FCC Rcd 1348 (1998) ("*Second MO&O*"), recon. dismissed, DA 99-1361, released July 12, 1999, recon. dismissed, FCC 00-59, released February 23, 2000.

² *Fifth Report and Order*, 12 FCC Rcd at 12856. We have earlier made preliminary decisions to hold periodic reviews and adopted schedules and detailed issues that were based on those preliminary decisions. See *Memorandum Opinion and Order/Third Report and Order/Third Further Notice of Proposed Rule Making* in MM Docket No. 87-268, 7 FCC Rcd 6924, 6964-66 (1992) ("*Third Report/Further Notice*"); *Fourth Further Notice of Proposed Rule Making/Third Notice of Inquiry* in MM Docket No. 87-268, 10 FCC Rcd 10541, 10548-49 (1995) ("*Fourth Further Notice/Third Inquiry*"). This projected schedule was modified in the *Fifth Report and Order*, where we decided to hold these periodic reviews every two years during the course of the transition.

construction schedule we established in the *Fifth Report and Order*. In this *Notice*, we invite comment on a number of issues that we believe require resolution to ensure that this progress continues and that potential sources of delay are eliminated. Specifically, we invite comment on: (1) whether to adopt a service replication requirement and to require enhanced service to the DTV stations' city of license; (2) whether to adopt a requirement that DTV stations elect their post-transition DTV channel by a certain date; and (3) how to resolve mutually exclusive DTV and DTV/NTSC applications.

II. Background

2. Our efforts to convert our nation's television system to digital television began in 1987, when we issued our first inquiry into the potential for advanced television ("ATV") services.³ The ensuing proceeding lasted a decade, during which we had the benefit of numerous comments and participation by broadcasters, equipment manufacturers, public interest groups, and the public. As the proceeding progressed, all-digital advanced television systems were developed and we began to refer to advanced television as digital television ("DTV"), recognizing that technological developments meant that any ATV system was certain to be digital. In February of 1993, the Advisory Committee on Advanced Television Service (the "Advisory Committee")⁴ reported that a digital HDTV system was achievable, but that all four competing digital systems then under consideration would benefit significantly from further development and none would be recommended over the others at that time.⁵ In May of 1993, seven companies and institutions that had been proponents of the four tested digital ATV systems, joined together in a "Grand Alliance"⁶ to develop a final digital ATV system for the standard. Over the next two-and-a-half years, that system was developed, extensively tested, and is documented in the ATSC DTV Standard. On November 28, 1995, the Advisory Committee voted to recommend the Commission's adoption of the ATSC DTV Standard. In 1996, the Commission adopted a standard for the transmission of digital television based on the ATSC DTV Standard with minor modifications.⁷

3. In 1997, in the *Fifth Report and Order*, the Commission adopted rules to implement the

³ *Notice of Inquiry* in MM Docket No. 87-268, 2 FCC Rcd 5125, 5127 (1987) ("First Inquiry").

⁴ The Commission established the Advisory Committee in the fall of 1987 to provide recommendations concerning technical, economic and public policy issues associated with the introduction of ATV service. The Advisory Committee, chaired by former FCC Chairman Richard Wiley, consisted of a twenty-five member parent committee, a Steering Committee, and three subcommittees.

⁵ *ATV System Recommendation of the FCC Advisory Committee on Advanced Television Service* (February 24, 1993) ("ATV System Recommendation").

⁶ The members of the HDTV Grand Alliance were AT&T, General Instrument Corporation, Massachusetts Institute of Technology, Philips Electronics North America Corporation, Thomson Consumer Electronics, The David Sarnoff Research Center, and Zenith Electronics Corporation.

⁷ *Fourth Report and Order* in MM Docket No. 87-268, 11 FCC Rcd 17771 (1996) ("*Fourth Report and Order*"). The Standard the Commission adopted does not include requirements with respect to scanning formats, aspect ratios, and lines of resolution.

Telecommunications Act of 1996 ("1996 Act"), which provided that initial eligibility for any advanced television licenses issued by the Commission should be limited to existing broadcasters, conditioned on the eventual return of either the current 6 MHz channel or the new digital channel. The Commission issued initial licenses for DTV, established service rules, including a requirement that broadcasters continue to provide free, over-the-air television service, and set an aggressive but reasonable construction schedule and a target date of 2006 for the completion of the transition. The Commission adopted a simulcasting requirement phased in at the end of the transition period. The Commission also recognized that digital broadcasters remain public trustees of the nation's airwaves and have a responsibility to serve the public interest. In the *Sixth Report and Order*, the Commission adopted a DTV Table of Allotments.⁸ After the adoption of the *Fifth Report and Order*, Congress made the 2006 reversion date statutory, in enacting the Balanced Budget Act of 1997, which provides that "[a] broadcast license that authorizes analog television service may not be renewed to authorize such service for a period that extends beyond December 31, 2006" unless the Commission grants an extension based on specific criteria enumerated in the statute.⁹ Since 1997, we have clarified and reconsidered the *Fifth Report and Order* and *Sixth Report and Order* during the course of two rounds of reconsideration, during which we have had the opportunity to remedy initial problems that might delay or derail the transition to digital television. With this *Notice*, we commence our first periodic review in our continuing effort to assure that the transition goes smoothly for American consumers, broadcasters, and other interested parties.

III. Progress Report

4. Pursuant to the construction schedule set forth in the *Fifth Report and Order* and in Section 73.624(d) of the Commission's rules, affiliates of the top four networks in the top ten television markets were required to complete construction by May 1, 1999; top four network affiliates in markets 11-30 by November 1, 1999; all remaining commercial television stations by May 1, 2002; and all noncommercial television stations by May 1, 2003.¹⁰ Construction permit applications are required to be filed before the mid-point in a particular applicant's required construction period.¹¹ Thus, all commercial television stations subject to the May 1, 2002 buildout deadline were required to file their DTV construction permit applications by November 1, 1999, and all noncommercial television stations are required to file their construction permit applications by May 1, 2000.

5. As of February 23, 2000, a total of 1376 television stations in all markets (amounting to 81% of all stations) have filed DTV construction permit applications, regardless of whether they were required to file by November 1, 1999. Applications have been received from approximately 97% of the

⁸ *Sixth Report and Order* in MM Docket No. 87-268, 12 FCC Rcd 14588 (1997) ("*Sixth Report and Order*"), on recon., *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, 13 FCC Rcd 7418 (1998) ("*Sixth MO&O*"), on further recon., *Second MO&O*, FCC 98-315, 14 FCC Rcd 1348 (1998).

⁹ 47 U.S.C. § 309(j)(14).

¹⁰ *Fifth Report and Order*, 12 FCC Rcd at 12841-42; 47 C.F.R. § 73.624(d).

¹¹ *Fifth Report and Order*, 12 FCC Rcd at 12839.

1314 commercial TV stations that were required to file by November 1, 1999. Requests for extensions of the filing deadline filed by stations that are not included in this 97% category generally indicated that they had pending rule making petitions requesting changes to their DTV channel, tower site problems or that their consulting engineer was unable to complete studies by the deadline. A total of 316 of all of these applicants have been granted construction permits; and 92 of those stations are on the air pursuant to those permits. Twenty-seven other stations are on the air with special or experimental DTV authority. The remaining pending applications are either awaiting additional information or Mexican, Canadian or other clearances or are technically more difficult to process because they require an interference analysis (applications that do not meet the "checklist" criteria for streamlined processing). Thirty-three of the 40 stations in the top ten markets required to complete construction by May 1, 1999, are on the air, and 6 others have been granted construction permits to build. In each of these markets, there is at least one DTV facility on the air pursuant to its permit and in six of these markets, the four affiliates of the largest commercial networks are all on the air. In markets 11-30, 78 of the 79 stations required to file construction permit applications by August 3, 1998 have filed these applications.¹² Seventy-two of these stations have been granted a construction permit and three others have been granted special temporary authority to operate while action on their application is pending. Forty-two stations are on the air pursuant to their permits, and 34 stations have requested extensions of time to complete construction and go on the air. Of these 34 stations requesting extensions, all but seven are facing practical and easily resolvable delays, according to the licensees. Examples of factors causing these delays are untimely delivery of equipment, bad weather and unavailability of tower crews. Most of these stations expect to be on the air early in 2000.

6. Initial evidence indicates that stations are facing relatively few technical problems in building digital facilities. Some stations are facing problems with tower availability and/or local zoning issues, but these problems do not seem to be widespread at this time, and, while some cases may be problematic, it appears that many cases are being worked out.¹³ Indeed, the Commission has helped broadcasters remedy such local problems in a number of ways, including creating, in May, 1998, a DTV Tower Strike Force, chaired by Commissioner Susan Ness to target potential problems in the implementation of DTV and to work with local authorities and broadcasters to expedite implementation of DTV. The Strike Force makes Commission staff available to aid local authorities and broadcasters by providing expedited answers to questions related to the process of assessing tower modification or construction and to facilitate the deliberations of reviewing entities. The DTV Strike Force has, for example, assisted local and county governments in understanding the FCC's Radio-frequency Radiation (RFR) requirements as they relate to the implementation of DTV and the related construction of towers. In one instance, the Strike Force sent technical experts to make RFR measurements with county engineers and to testify in an effort to assure these officials that radiation harmful to humans would not result from the proposed DTV construction. Commissioner Ness and the Strike Force also regularly participate in the meetings of the FCC Local and State Government Advisory Committee (LSGAC). The Strike Force presents the current

¹² The one remaining station that has not yet filed a construction permit application is Station WTVJ, Miami, which has not done so because it has an outstanding rule making petition pending to change its DTV channel.

¹³ See Andrew Bowser, "Up and Running in the Top 10," *Broadcasting and Cable*, August 2, 1999, at 30; Karen Anderson, "Digital--Ready or Not?", *Broadcasting and Cable*, August 2, 1999, at 34. For a description of the zoning issues that have arisen in the Denver market, see "Tower toppled; new antenna denied," *Lakewood Sentinel*, July 15, 1999.

facts regarding the DTV rollout and related tower construction issues and takes comments and ideas from the Committee under advisement.

IV. Issue Analysis

7. In the *Fifth Report and Order*, we concluded that we should undertake a periodic review every two years until the cessation of analog service to help the Commission ensure that the introduction of digital television and the recovery of spectrum at the end of the transition fully serves the public interest. We noted that, during these reviews, we would "address any new issues raised by technological developments, necessary alterations in our rules, or other changes necessitated by unforeseen circumstances."¹⁴ We invite commenters to provide us with information not previously presented to the Commission raising issues that must be resolved in order to assure a smooth transition. Our goal is to assure an open proceeding that will allow us to resolve any impediments to a complete and rapid transition. Aside from regulatory benchmarks, is the digital transition proceeding in such a way as to serve the public interest? Are there factors such as the pace of DTV receiver sales or the availability of financing for digital facilities that reflect the state of the digital transition?

8. Concerns have arisen in a number of areas, including tower siting, copy protection, and cable compatibility. We invite comment on the critical unresolved issues in these areas and how they affect the progress of the digital transition. Are broadcasters able to secure necessary tower locations and construction resources? To what extent do zoning disputes, private negotiations with tower owners, and the availability of tower construction resources affect the transition?

9. With respect to cable compatibility, a recent agreement between the Consumer Electronics Association ("CEA") and the National Cable Television Association ("NCTA") should permit introduction of cable-compatible television receivers in the near term. While the agreement covers a number of technical specifications, including on-screen program guides, the agreement does not cover labeling of digital receivers. While we favor allowing the affected industries to reach agreement on this issue, industry failure to reach such agreement on a timely basis may necessitate further Commission action in the form of initiating a rule making proceeding. To what extent would a failure to reach agreement on the labeling of digital receivers hinder the transition?

10. In addition, the agreement does not cover the copy protection issues. We also seek comment on the extent to which a failure to reach agreement on copy protection technology licensing and related issues would hinder the transition.

11. Concerns also have arisen regarding the DTV transmission standard. We adopted the DTV Standard in the *Fourth Report and Order* in the digital television proceeding after extensive testing and with the participation of the affected industries and the public. While we continue to believe that NTSC service replication is achievable by DTV operations using the 8-VSB standard, we recognize that some in the industry have raised various issues with respect to that standard. For example, Sinclair Broadcasting Group filed a Petition for Expedited Rulemaking urging the Commission to modify its rules to permit the use of COFDM modulation in addition to the 8-VSB standard. Sinclair argued that the COFDM standard offered easier reception with simple antennas and would enable broadcasters to

¹⁴ *Fifth Report and Order*, 12 FCC Rcd at 12856-57.

provide fixed, mobile and portable video services with greater capacity for technological improvement. We dismissed that petition, indicating that concerns about 8-VSB, such as those raised in the Petition, were better addressed in the context of this proceeding.

12. We invite comment on the current status of the 8-VSB DTV standard. We are particularly interested in the progress being made to improve indoor DTV reception under the existing transmission standard and manufacturers' efforts to implement DTV design or chip improvements. We also ask the industry to submit information regarding any additional studies that may have been conducted regarding NTSC replication using the 8-VSB standard.

13. Some broadcasters have recommended that the Commission address over-the-air signal reception by setting receiver standards, which we understand to mean performance thresholds (like the UHF noise figure requirement), as opposed to mandatory technology specifications (like the ATSC digital standard itself). Accordingly, we ask for comment first on whether we have the authority to set minimum performance levels for DTV receivers. This issue was pleaded several years ago by various parties in response to the Commission's Fourth and Fifth Further Notices of Proposed Rule Making in the DTV proceeding, and comments in this proceeding should take account of these earlier submissions. Second, we request comment on the desirability of adopting minimum performance levels. And, third, comments should address how these requirements should be structured, including timing considerations.

14. Some additional issues pertain to the transition, such as the issue of digital broadcast signal carriage on cable systems, and are the subject of their own separate proceedings.¹⁵ While we intend for this proceeding to be a broad and open proceeding, it would not be constructive, as a general matter, to unduly burden this proceeding with issues that are the subject of their own proceedings or with requests for reconsideration of issues that have already been decided, or where the standard set out in the *Fifth Report and Order* is not met. Some of the issues that are outside the scope of this proceeding include: fee issues;¹⁶ eligibility issues; issues relating to public television;¹⁷ and channel allotment or change requests. In addition, we believe that it is too early in the transition to address a number of issues referenced in the *Fifth Report and Order*, ¶¶ 34, 116, as issues we would handle in our periodic reviews. These issues include reconsidering the flexible approach to ancillary or supplementary services, the proper application of the simulcast requirement, and the special needs of noncommercial stations in converting to digital television beyond the accommodation granted them by allowing them to complete construction a year after the last category of commercial broadcasters. The issue of the appropriateness of 2006 as a target recovery date, also referenced in the *Fifth Report and Order*, ¶ 116, is inappropriate for this review as Congress has, in the Balanced Budget Act of 1997, confirmed December 31, 2006 as the date for completion of the transition and established a procedure and standards for stations to seek an extension of that date.¹⁸

¹⁵ *Notice of Proposed Rule Making* in CS Docket No. 98-120, 13 FCC Rcd 15092 (1998).

¹⁶ *Report and Order* in MM Docket No. 97-247, 14 FCC Rcd 3259 (1998), *recon. denied*, FCC 99-362, released November 24, 1999

¹⁷ *Notice of Proposed Rule Making* in MM Docket No. 98-203, 14 FCC Rcd 537 (1998).

¹⁸ 47 U.S.C. § 309(j)(14). Other issues referenced on reconsideration that we will not review here include: minimum programming hours, *Fifth MO&O*, ¶ 32; tower space issues for noncommercial FM stations, *Fifth*

15. In addition to inviting general comment on the progress of the transition, we invite specific comments on the areas discussed in detail below.

A. Full-replication and principal community coverage

16. *Replication.* In the DTV *Sixth Report and Order*, we established “replication” as a goal in the creation of the initial DTV Table of Allotments. Our replication goal means that each DTV channel allotment was chosen to best allow its DTV service to match the Grade B service of the NTSC station with which it was paired.¹⁹ Implicit in our use of this criterion in creating the initial DTV Table is an expectation that DTV stations will eventually be constructed with “full-replication” facilities. Full-replication facilities would entail a combination of transmitter site, effective radiated power, directional antenna characteristics and antenna height that is adequate to cover at least the same area as is served by the NTSC station.

17. While expecting eventual use of full-replication facilities by each station, we recognized that there initially would be few DTV receivers on which DTV stations could be viewed. Thus, early DTV broadcasts would reach very few viewers and present negligible opportunity for revenue to offset the DTV construction costs that were expected to exceed one million dollars per station. Accordingly, we granted the flexibility for DTV stations to build initial facilities that would cover a significantly smaller area than full-replication facilities, provided that the predicted DTV service contour covered the station’s city of license.²⁰ We did not, therefore, in previous DTV proceedings, adopt an explicit replication requirement or a requirement that DTV stations provide a higher level of service than Grade B to their city of license. Nevertheless, we are presently protecting the full replicated service areas based on the engineering parameters associated with the DTV allotment table.²¹ As discussed below, we are concerned that the lack of an explicit replication requirement and a city-grade service requirement may encourage some licensees to locate their proposed DTV facilities at a substantial distance from their NTSC facilities and their communities of license. This may have negative consequences for the transition to digital television.

18. We expected that some stations would build their DTV station at a different site from their authorized NTSC site. In particular, we encouraged stations in a market to explore development of a

MO&O, ¶ 61; and adopting an immediate transition, *Fifth MO&O*, ¶ 78. We believe it is too early in the transition to consider increasing the number of required digital programming hours and to consider adopting an immediate transition. Moreover, it does not appear that noncommercial FM stations are having difficulties based on the loss of tower space to digital stations.

¹⁹ *Sixth Report and Order*, at ¶¶ 29-30. “NTSC” is the name commonly used for the existing analog television transmission system. The system was developed by, and named for, the National Television Systems Committee.

²⁰ *Fifth Report and Order*, at ¶ 74 & n. 161.

²¹ See Appendix B of the *Second MO&O*; Appendix B of the *Sixth MO&O*; Appendix B of the *Sixth Report and Order*.

common site where that was feasible.²² We also allowed the flexibility to move within a 5-kilometer radius of the DTV Table reference coordinates with a streamlined "checklist" application.²³ While anticipating some movement and allowing small initial DTV facilities, we expected that most stations would build their DTV facilities at or near their NTSC sites. We did not focus on stations that operate from "fringe" sites, such as those licensed to smaller communities near the edge of their market or those that are site restricted and required to broadcast from a site that does not serve their market as well as other stations with which they compete. Nor did we consider that some small market stations operate adjacent to a larger market. These fringe area stations often would prefer to operate from a central location or in the larger market where they can potentially serve a larger population and achieve higher revenues.

19. Most of the DTV applications that have been filed and granted thus far are for locations at or near their current NTSC antenna sites. However, in conformance with the rules we established, several licensees have sought authority to move their DTV station to a more central location in their market or toward a larger market. Others have filed petitions for rule making to change their DTV allotment, including their assumed transmitter site and/or technical facilities.

20. These situations pose a problem with respect to our expectation that licensees will eventually replicate their NTSC facilities. Licensees that build DTV facilities that do not cover the same area as their NTSC stations may present problems at the end of the transition. If these stations choose to, and are able to, remain on their DTV channel at the end of the transition, people within the NTSC service area but outside of the DTV service area will lose service. We question whether this loss of service would serve the public interest. Similarly, the goals of our requirement that the NTSC programming be simulcast on the DTV channel near the end of the transition would be undermined if the DTV coverage does not approximate or encompass the NTSC coverage area. In addition, a large scale move of DTV stations to larger urban markets would pose a problem under Section 307(b) of the Communications Act, 47 U.S.C. § 307(b), as it might represent a *de facto* reallocation from smaller, more rural and underserved areas to larger well-served urban areas and might undermine our allotment decisions.

21. *Request for Comments.* We believe it is important now to consider what requirements are appropriate for eventual replication so that stations can take account of these requirements as they plan and construct their DTV facilities. We seek comment on whether we should establish a replication requirement and, if so, how we should frame it, when it should become effective, and what consequences should follow for stations that fail to meet it.

22. If we decide to adopt a replication requirement, we must decide how to determine whether a DTV station is replicating its NTSC facilities. One possible approach would be to require essentially the same service as is provided by the NTSC facilities. In order to implement this approach, we would need to decide whether to depict NTSC and DTV service using coverage contours or using the Longley-Rice propagation model in accordance with OET Bulletin 69 (July 2, 1997).²⁴ We would also need to decide

²² *Sixth Report and Order*, at ¶ 102.

²³ *Fifth Report and Order*, at ¶ 73.

²⁴ See 47 C.F.R. 73.622(e).

whether the replication requirement should be based on the population or the area served. We note that our rules for determining interference between DTV stations are based on population.²⁵ Finally, we would need to address the question of what percentage of the NTSC Grade B service must be replicated. While conceptually straightforward, this approach may be difficult to implement, with many circumstances needing individual interpretations or exceptions.²⁶

23. A possible alternative is the use of a DTV principal community service requirement as discussed below. Such a requirement might be easier to implement than a service replication requirement, but the extent to which replication would actually be achieved could vary significantly and for some stations it may leave more people unserved. A requirement for a stronger signal to cover a station's city of license would effectively ensure that the DTV service contour would extend some distance beyond the city of license. The field strengths suggested below at paragraph 33 would be based on the differences between NTSC Grade B and principal community service. We believe that the resulting DTV coverage would extend past the DTV principal community service contour to an extent that would approximate NTSC Grade B service. We invite comment on these proposals and invite commenters to offer their own additional or alternative proposals as to how we might assure eventual full replication by DTV licensees of their NTSC facilities.

24. We also seek comment on when we should implement a replication requirement. While many of the DTV applications that have been filed propose facilities that would serve a high percentage of the station's analog Grade B contour, and some have sought to maximize facilities in a manner that would expand their DTV coverage, there are also a large number of applicants that have chosen to "start small." Construction of most of these stations is not required to be completed until May 1, 2002. Noncommercial educational DTV stations do not need to complete construction until May 1, 2003. In order to allow stations a reasonable period to operate with smaller facilities, it seems appropriate to delay a replication requirement until at least May 1, 2004. Other possible choices include requiring full replication by the planned end date of the transition, which is December 31, 2006, or by the date the transition actually ends for the stations in each particular market, whether or not that date is extended beyond December 31, 2006 pursuant to the statute. It is possible that delaying the replication requirement for too long could undermine the broad availability of digital service and thus forestall the transition itself by blunting the incentive for digital set penetration. One alternative that might mitigate this effect would be to require each DTV station to achieve replication by one year after the date it is required to complete construction pursuant to the DTV construction schedule. We invite comment on these alternatives. The appropriate date by which we should require full replication may also depend on how strictly replication is required and on the consequences of not complying. Another factor in our decision as to when to institute a replication requirement is the timing and options available for licensees choosing which of their two channels they want to operate their DTV station on after the transition. This factor is discussed in more detail below. We invite comment on these issues.

²⁵ See 47 C.F.R. 73.623(c).

²⁶ For example, how would replication be determined if the NTSC station's authorized coverage has changed or if it has both licensed facilities and facilities authorized by a construction permit and those facilities would cover different areas?

25. We presume that licensees will follow all applicable FCC rules as a matter of course. Moreover, with respect to any replication rule we might adopt, we note that it would be in a licensee's best interest to comply with a replication rule in order to maximize potential audiences. Nonetheless, we propose that any station's failure to comply with the proposed replication rule would result in the loss of protection of the station's full-replication allotment facilities. We also invite comment on what, if any, other consequences we might impose for a station's failure to replicate.

26. We note that we have proposed as a possible consequence for failing to meet a replication requirement, the loss of protection of the full allotted DTV facility. We invite comment as to whether regardless of what other consequence we impose for failure to replicate, or even in the event that we do not adopt a full-replication requirement, we should, by a certain date, place an end to our current policy of protecting the full replication facility regardless of the parameters and service contour a DTV station provides. Such a policy would foster spectrum efficiency. It would allow increased opportunities for new DTV service by new entrants and would allow other existing stations to maximize their service on what would otherwise be fallow or wasted spectrum, in that it is being protected but not used. If we adopt such a policy, when should we stop protecting a station's DTV facilities beyond the actual service contour?

27. *DTV Principal Community Coverage.* Although we referred to the provision we made for allowing DTV stations to operate initially with limited minimum DTV facilities as a requirement for coverage of a station's principal community, it is actually inconsistent with the NTSC principal community coverage requirement, as the city-grade coverage requirement for NTSC stations is stronger than a Grade B signal. As discussed below, for NTSC stations, the principal community requirement is a significantly stronger signal level than the Grade B service standard. For DTV stations, the initial required signal over the community of license is the same as the DTV service contour standard. A signal that meets the principal community coverage standard ("city grade signal") is commonly considered to be one that produces a better picture quality than a Grade B signal. While it is true for NTSC that service can be described as a picture quality that gets better as the median signal level increases, it can also be described in terms of an "acceptable" picture quality being available for a larger percentage of the time as the median signal level increases.

28. In DTV, there are virtually no gradations in picture quality that are dependent on signal strength. The signal must reach a certain minimum threshold for a picture to occur; it does not matter how little or much the signal exceeds that threshold requirement, the picture quality will not change. When the signal is insufficient, the picture screen will freeze or go blue. Thus, DTV levels of service can be described in terms of the percentage of the time that the picture is available. An individual's subjective determination of "acceptable" DTV service would be based on their tolerance for interruptions to the programming (picture freezing or going to a blue screen). Some viewers may find DTV service acceptable, even if lost for a minute or two each hour (two to three percent of the time). Others may find service to be unacceptable if disruptions exceed 10 or 20 seconds in an average hour (less than one half percent of the time).

29. For the most part, we believe DTV stations that replicate their NTSC service will effectively provide city grade service to their community of license. Such DTV stations would provide a signal level over their city of license that is stronger than the signal level we established for the DTV service contour by an amount comparable to the difference between NTSC city grade and Grade B service contour values. Also, where a DTV station is paired with an NTSC station, its DTV allotment is

protected, which maintains its ability to replicate to a great extent and therefore protects its ability to provide a stronger signal level over its city of license. Thus, in these instances, sufficient signal strength will be available to maintain reliable reception. However, we have been presented with proposals that do not involve replication. In such situations, a DTV licensee might seek to locate its station so that its city of license is barely within its service contour, which may result in service that is less reliable or available to a smaller percentage of locations than usually expected for "city grade service."

30. *Request for Comments.* In most respects, the planning factors for the DTV service contour correspond to the planning factors for the NTSC TV Grade B service contour. Applications to change the power, antenna height or location of other DTV stations are permitted to cause interference, as long as the interference is "*de minimis*" (reducing the population served by a station by no more than 2%, not to exceed 10% for all interfering sources). Reception near the edge of the DTV service contour is not protected from interference. A similar situation occurs among NTSC stations where a new or modified NTSC facility is permitted to cause interference within another station's Grade B contour, as long as the minimum distance spacing requirements are met. Accordingly, we invite comment as to how to define adequate DTV service to the city of license.

31. How to define adequate service to the city of license also is an issue for DTV stations that do not have a paired NTSC channel. In the *Fifth MO&O*, we afforded applicants for NTSC stations whose construction permit applications were not granted as of the date of adoption of the *Fifth Report and Order* (and who therefore were not eligible for initial paired DTV licenses) the opportunity to construct a DTV station immediately on their single 6 MHz NTSC channel provided that the proposed DTV facility protected all DTV and NTSC stations by complying with all applicable DTV technical rules. Alternatively, if they chose first to construct an NTSC station, they would be allowed to convert it to a DTV station, upon application to the Commission, at any time during the transition (and they would be required to convert to DTV at the end of the transition, when NTSC broadcasting ceases).²⁷ In the *DTV Second MO&O*, we clarified that the pending NTSC applicants could convert to DTV without first being granted an NTSC construction permit.²⁸ We seek comment on the appropriate level of principal community service for these DTV stations. We also seek comment on the appropriate level of principal community service for those DTV stations that have changed their DTV channel (and authorized facilities) pursuant to rule making, where there is no longer a correspondence between NTSC and DTV service areas.

32. In order to address the foregoing concerns while minimizing the impact on DTV broadcasters, we propose to require that a DTV principal community be served by a stronger signal than that specified for the general DTV service contour. By requiring that DTV broadcasters provide a minimum, higher, level of service over their community of license, we would limit the extent to which DTV broadcasters can migrate from their current service contour. A stronger principal community coverage requirement would improve the availability and reliability of DTV service in the city of license. It would also provide an extra measure of protection from interference to DTV service in the city of license. Finally, it would provide a method of requiring improved replication performance that can be determined by relatively simple and straightforward methods that are well established in the NTSC

²⁷ *Fifth MO&O*, at ¶¶ 11, 14-15.

²⁸ *Second MO&O*, at ¶ 41.

service. We note that NTSC broadcasters must provide a signal over their city of license that is stronger than the signal strength defined for their Grade B service contour.²⁹ We invite comment on this approach of requiring DTV stations to provide a similarly stronger signal. Would it resolve the problems that we have identified? Would it create undue difficulties for DTV broadcasters to accomplish, and, if so, would these difficulties be so severe as to delay the transition?

33. We invite comment as to the signal level that we should require to be placed over the DTV station's principal community, should we adopt such a requirement for DTV. One approach to resolving this issue is to use a set of field strength values that corresponds to the current principal community signal requirements for NTSC stations. We note that the required principal community service contours for NTSC stations are 27, 21 and 16 dB higher than the Grade B service contours for channels 2-6, 7-13 and 14-69 respectively.³⁰ The stronger NTSC principal community contours are based on an assumed receiving antenna with less gain, urban noise, and greater probability of locations receiving service (90%). Adding the same amounts to the DTV service field strength values results in the following table:

Channels	Field Strength (dBu)
2-6	55
7-13	57
14-69	57

Even though these signal intensities are defined as discrete values measured in dBu's, the intensity of broadcast signals at particular locations and at particular times cannot be precisely determined, regardless of the predictive method used. Signal strength varies randomly over location and time, so signal propagation must be considered on a statistical basis. Most prediction methods, including the Commission's propagation curves, predict the occurrence of median signal strengths (i.e., signal strengths expected to be exceeded at 50% of the locations in a particular area at least 50% of the time). Under this approach, "location" and "time" variability factors are added to the signal level so that the desired statistical reliability is achieved. The values chosen for the principal community signal intensity account for this variability. Therefore, assuming the use of a receiving antenna with 0 dB gain relative to a half-wave dipole, the above values predict that at least 90% of the locations along principal community contour will receive an acceptable picture 90% of the time. We invite comment on whether this required signal coverage to the community of license is an appropriate one to adopt for DTV stations. Could it be accomplished readily? Would the economic costs of adopting the proposed level of principal community service outweigh the benefits that we seek to achieve? If so, we invite commenters to address whether we should adopt an alternative minimum level of principal community service and to justify that alternative proposed level.

34. We tentatively believe that we can minimize any increased difficulties such a requirement might place on DTV broadcasters by delaying its implementation. Accordingly, we seek comment on

²⁹ See 47 C.F.R. § 73.685(a). This rule requires the station's transmitter to be located so that, based on the effective radiated power and antenna height above average terrain chosen, a specified minimum field strength is placed over the entire principal community to be served. The rule establishes minimum field strengths which vary based on whether the station operates on channels 2-6, 7-13, or 14-69.

³⁰ See 47 C.F.R. § 73.685(a).

when any such requirement should be made effective. We tentatively propose that DTV stations that are paired with NTSC stations be required to meet the new principal community requirement by May 1, 2004. Alternatively, we invite comment as to whether we should tie the city-grade service requirement to the construction schedule, with the requirement imposed within a certain period, a year, for example, after construction is scheduled to be completed (see paragraph 24, *supra*). For licensees with paired DTV and NTSC stations that intend to operate with DTV on their current NTSC channel after the transition (see paragraphs 35-39, below), we propose that they be required to file a DTV application reflecting that decision by that date. For NTSC stations that do not have a paired DTV station, we propose that the stronger DTV principal community service be required when they seek to switch to DTV operation. For petitioners seeking a DTV channel change, we propose to require a showing that the principal community service requirement can be met with the proposed DTV allotment facilities or a commitment to elect their NTSC channel for their post-transition DTV operation. The 2004 date is two years before the end of the transition, and by that point DTV broadcasters should be able to build out their permanent facilities. That date is at least one year after the deadline for all broadcasters, including noncommercial broadcasters, to complete construction, and commercial broadcasters by that date will have been on the air for at least two years. For these reasons we believe that it would not be unduly onerous to implement a requirement for a higher principal community service contour at this date. We invite comment on these proposals and ask commenters to address whether other measures are necessary in addition to or as an alternative to these proposals to address our concerns.

B. Channel Election

35. In the DTV *Sixth MO&O*, the Commission decided that the DTV service after the transition will be limited to core spectrum, comprised of current TV channels 2 through 51.³¹ We had minimized the number of out-of-core DTV channel allotments and made a special effort to designate a DTV channel in the core for each station that had its NTSC channel outside of the core. In this way, at the end of the transition, whichever channel (DTV or NTSC) was in the core could become the station's permanent DTV channel.³² There are currently 17 stations that have both their NTSC and their DTV channels outside of the core. We indicated that once the transition ended and one of the two channels each broadcaster is temporarily authorized to use is recovered, there will be adequate spectrum to ensure that all stations with initial out-of-core DTV allotments can be provided with new channels within core spectrum between channels 2-51.³³

36. On reconsideration of the DTV *Sixth Report and Order*, some broadcasters asked that we require stations with both channels in the core to immediately choose the channel they intend to keep following the transition. They argued that early election should be required so that those stations with DTV channels outside the core would know what channels will eventually become available and could plan for their conversion to one of those channels. We declined to require early channel election at that time based on the small number of situations with both NTSC and DTV on out-of-core channels and the

³¹ *Sixth MO&O*, at ¶ 42.

³² *See Sixth MO&O*, at ¶ 55.

³³ *Sixth MO&O*, at ¶ 57.

lack of needed experience with DTV operation, which would prevent many broadcasters with both channels in the core from making an appropriate decision. We indicated that we would make case-by-case decisions on channels for stations moving into the core, considering factors such as preserving noncommercial educational TV service, reducing interference and improving replication.

37. Changed circumstances suggest that it would be helpful now to adopt a deadline for channel election. We believe that there will be more out of core stations that must be accommodated with a core channel than we initially anticipated. As discussed above, new applicants will be allowed to convert their single NTSC channels to DTV operation and those on channels outside the core will be provided a post-transition channel inside the core. There are a number of such "new applicant" NTSC stations authorized on channels outside the core, and dozens more could be authorized under procedures announced in the recent filing window Public Notice.³⁴ The problem of finding a core channel for these stations is exacerbated because there are more stations currently occupying core channels than we initially planned on. Pursuant to the window filing Public Notice, some of those pending applications and rule making petitions could also be granted on core channels, if they can adequately protect NTSC and DTV stations from interference.³⁵ Further, recent legislation requires the establishment of a new category of primary, "Class A" TV stations, which also may limit availability of core channels in some areas.³⁶ In addition, maximized DTV facilities that operate on channels within the core might complicate the problem of finding a core channel for out-of-core stations because these maximized stations are more difficult to protect.

38. *Request for Comments.* We tentatively conclude that it is now time to begin setting up a process to assure early election by DTV stations of their post-transition channel. Stations making the channel conversion at the end of the transition will need time to plan facilities, order equipment and arrange for construction. Ideally, they would turn on their DTV station on their new core channel the day after the transition ends and other broadcasters turn off their second channel. With the target date for the end of the transition set for December 31, 2006, it seems reasonable to identify the channels these stations will be moving to not later than 2004. To accomplish this, we could require DTV licensees to make a binding decision and elect one of their two core channels by early 2004, at the latest. One possibility is to impose May 1, 2004 as the deadline for election. This date would allow at least one year of DTV operation pursuant to our staggered construction schedule (with noncommercial educational TV stations provided the longest time to construct and required to complete construction by May 1, 2003). We seek comment on whether this date represents the proper balance between the goals of allowing DTV

³⁴ Public Notice, DA 99-2605, released November 22, 1999, Mass Media Bureau Announces Window Filing Opportunity For Certain Pending Applications and Allotment Petitions for New Analog TV Stations.

³⁵ *Id.*

³⁶ Community Broadcasters Protection Act of 1999, Section 5008 of Pub Law 106-113, 113 Stat. 1501 (1999), Appendix I, *codified at* 47 U.S.C. § 336(f). The Community Broadcasters Protection Act was enacted as part of the Intellectual Property and Communications Omnibus Reform Act of 1999, which itself is part of a larger consolidated omnibus appropriations bill, entitled, "Making consolidated appropriations for the fiscal year ending September 30, 2000, and for other purposes." See *Order and Notice of Proposed Rule Making* in MM Docket Nos. 00-10 & 99-292, FCC 00-16, In the Matter of Establishment of a Class A Television Service (released January 13, 2000).

stations enough time to gain experience with DTV operation and allowing stations that must move enough time to plan for their DTV channel conversion. We note that the recently adopted Community Broadcasters Protection Act of 1999 requires the Commission, within 18 months of the Act's enactment, to identify by channel, location, and applicable technical parameters, the 175 additional DTV channels that were referenced in paragraph 45 of the Commission's "February 23, 1998, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order (MM Docket No. 87-268)."³⁷ In that Order, the *Sixth MO&O*, the Commission expanded the DTV core spectrum to include all channels 2-51, and noted that this expansion would add approximately 175 additional DTV channels. We invite comment as to whether, based on the new obligations imposed by this recent legislation, we are required to impose an earlier election date than May 1, 2004.³⁸

39. We also seek comment on the appropriate criteria for determining who is allowed to participate in this process, whether any category of participants should have blanket priority over other participants, and which channels are available. Should all stations with an out-of-core DTV channel and a core NTSC channel be required to use their NTSC channel, as opposed to being permitted to seek an alternative in-core DTV channel? Additional stations may want to become involved in changing their DTV channels at the end of the transition in order to improve their replication or decrease interference. Some stations with both channels in the core may not want to remain on either channel. Should stations that must move to a new channel have the highest priority (first selection of channels that are returned)? We also seek comment on whether particular channels should be off limits as we explore the possibilities of alternative uses. For example, should channel 6 or another channel or channels be cleared for other broadcast purposes, such as is being considered in our terrestrial digital audio broadcasting proceeding?³⁹ Should new use of channels 3 and 4 be avoided to minimize expense and inconvenience to cable subscribers whose cable boxes are wired for output on one of those channels? We also invite comment on whether the FCC should select the final channels in order to allow us to maximize efficiency of broadcast allotments. Assuming we do allow broadcasters to elect their channel, of course, under our authority to manage the spectrum, we would review the stations' channel elections to be sure that the use of spectrum is efficient and serves the public interest.

C. Mutually Exclusive Applications

40. We also wish to use this proceeding to examine some DTV application processing procedures. In particular, we invite comment on (1) whether to establish DTV application cut-off procedures; (2) how we should resolve conflicts between DTV applications to implement "initial" allotments; and (3) the order of priority between DTV applications and NTSC applications.

41. DTV applications must protect DTV allotments from predicted interference as indicated in

³⁷ 47 U.S.C. § 336(f)(6)(B). See *Sixth MO&O*, 13 FCC Rcd 7418, 7436 (1998).

³⁸ We note that in *Order and Notice of Proposed Rule Making* in MM Docket Nos. 00-10 & 99-292, FCC 00-16, *In the Matter of Establishment of a Class A Television Service*, ¶25 (released January 13, 2000) ("Class A NPRM"), we invited comment on aspects of this new DTV channel identification requirement.

³⁹ See *Notice of Proposed Rule Making* in MM Docket No. 99-325, *Digital Audio Broadcasting Systems and Their Impact on Terrestrial Radio Broadcast Service*, FCC 99-327, ¶ 41 (released November 1, 1999).

the *Sixth Report and Order* and Section 73.623 of our rules. In general, DTV applications that do not expand the coverage area of their DTV allotment also do not increase the interference that the applied-for station would be predicted to cause. In this respect, these applications are treated like "checklist" applications, which conform to their allotment and accordingly are subject to streamlined processing that allows them to be granted without analysis of predicted interference. In addition, the protection afforded facilities authorized pursuant to such applications is based on the required protection of their DTV allotment.

42. Applications for the paired DTV allotments in the initial DTV table (whether the first application for a construction permit (CP), a subsequent application to modify a DTV CP, or an application for a CP to change a licensed DTV facility) generally may request facilities that would expand their coverage area, subject to not exceeding the maximum facilities permitted by the rules. As indicated above, such an area-expanding application must protect DTV stations, including DTV allotments and authorized (CP or licensed) DTV stations. Where two DTV applications seek to expand their allotment coverage area and one or both would cause prohibited interference with the facilities specified in the other application, such applications are mutually exclusive (MX). If the first-filed application is granted before the second application is filed, the second application must protect the first, which would then be an authorized DTV facility. If the second application is filed before the first is granted, the two conflicting applications would be mutually exclusive. We wish to explore several options for resolving such MX cases.

43. *Request for Comments.* As a primary matter, we seek comment on whether to adopt a cut-off procedure for such DTV area-expansion applications to minimize the number of mutual exclusivities and to facilitate applicants' planning with respect to their proposals. A cut-off process could minimize the number of MX situations that develop by requiring conflicting applications filed after a cut-off date to protect the earlier-filed, cut-off application. In the past, the Commission has managed the processing of some other categories of broadcast service applications by publishing "cut-off" notices that established a date after which competing or otherwise mutually exclusive applications were not allowed to be filed. NTSC minor change applications have not been subject to cut-off procedures, so such applications can become MX until the day they are granted. We have previously indicated that we would treat an initially eligible station's DTV construction permit application as a "minor change." Minor change status meant that we did not consider these initial applications to be requests for new stations but rather a modification of facilities.⁴⁰ Under current processing procedures, we do announce the acceptance of these DTV applications without establishing a cut-off date. With respect to DTV service area-expansion applications,⁴¹ we could augment this public notice by including a cut-off date provision, which would announce that MX applications must be filed within a period of time. Under such an approach, conflicting applications filed after that time has passed would not be considered MX, but would have to protect the earlier-filed application. We seek comment on an appropriate duration for a cut-off period should we adopt such an approach. This approach could be similar to the process established for DTV "maximization" applications, where we allow a thirty day period during which oppositions to the

⁴⁰ *Fifth Report and Order* at ¶ 74 and n. 159.

⁴¹ Service area-expansion includes "maximization" applications that increase power and site or facilities change applications that increase a station's DTV service area in one or more directions beyond the area resulting from the station's allotment parameters.

application must be filed.⁴² Another option would be to consider such applications cut-off as of the close of business on the date they are filed. We would be concerned that such a day-to-day cut-off could prompt an initial surge of area-expansion applications on the first day it became effective. However, after that day, such an approach would minimize the number of MX situations. We invite comment on whether we should adopt a cut-off process and if so, on the appropriate duration.⁴³

44. Next, we seek comment on how to resolve mutual exclusivities that arise. There are a number of alternative methods we could use, and we invite comment on these as well as others that commenters may wish to propose. Under one possible approach, where two or more DTV area-expansion applications are MX, we could grant all such applications regardless of the interference that could be caused in areas beyond the DTV allotment service area. Such an approach would facilitate Commission action on applications, resulting in an early resolution of contested cases and more rapid grant of construction permits. This option might prove to be an effective system to provide DTV service to the public at the earliest date. We anticipate that where each application proposal protects the other DTV allotment and any authorized DTV service area, but their mutual expansion efforts result in a prohibited amount of interference, the loss of service would be to areas that would not have been served by the original allotments, anyway. If we adopt such an approach and grant all applications in such a situation, we would encourage the stations to negotiate and seek engineering solutions to minimize the loss of service in a mutually agreeable manner. It appears that if both stations begin transmissions with their proposed facilities at the same time, the people subject to interference will not be suffering a loss of service as they will not have had sufficient signal for service prior to the interfering power increases. Instead, they simply will never gain the service they might have had if only one of the stations had sought to expand its coverage. We invite comment on this view.

45. As an alternative to the foregoing approach, we invite comment as to whether we should consider MX DTV area-expansion applications using a DTV new station application procedure. Using such an approach, we would encourage pending mutually exclusive new DTV applications (or modifications involving area expansion) to resolve their mutual exclusivity by engineering solutions or by settlements. We note the statutory directive to "use engineering solutions...and other means" to resolve competing applications.⁴⁴ We invite comment on this approach for resolving MX situations involving new DTV station applications, as well as situations involving only DTV area-expansion applications. Where such mutual exclusivities cannot be resolved by negotiation, we invite comment as to whether these applications should be dismissed or, alternatively, whether spectrum auctions are legally permitted and, if so, to what extent, and whether they are an appropriate approach. We note that Section 309(j) of the Communications Act of 1934, as amended ("the Act"), 47 U.S.C. §§ 309(j), added by the Balanced Budget Act of 1997, provided for competitive bidding to resolve mutually exclusive applications for "any initial license or construction permit," but specifically excludes from competitive bidding, "initial licenses or construction permits for digital television service given to existing terrestrial

⁴² See *Second MO&O* at ¶ 49.

⁴³ On January 4, 2000, Fox Television Stations, Inc. filed a letter with respect to DTV application cut-off procedures and other DTV maximization application processing issues. We incorporate the letter in the record of this proceeding and seek comment on the issues raised therein.

⁴⁴ 47 U.S.C. § 309(j)(6)(E).

broadcast licensees to replace their analog television service licenses...."⁴⁵ Thus, by its terms, Section 309(j) would permit us to use competitive bidding to resolve mutual exclusivities for DTV applications for new facilities that are not intended to replace analog stations.

46. We invite comment as to whether we could use competitive bidding to resolve mutually exclusive applications from initial DTV licensees involving area expansion beyond the full-replication facility. In the *First Report and Order* in MM Docket No. 97-234, GC Docket No. 92-2, & GEN Docket No. 90-264,⁴⁶ we concluded that the Commission is not precluded by the language of Section 309(j) from auctioning mutually exclusive analog modification applications. As we noted, "applications proposing major changes to existing facilities are, in our view, analogous to applications for construction permits for new stations."⁴⁷ The Commission also noted that "subjecting a modification application to competitive bidding may also be particularly appropriate where it is mutually exclusive with one (or more) initial applications, as Section 309(j) mandates the use of auctions where mutually exclusive applications are accepted for "any initial license or construction permit."⁴⁸ The Commission was there speaking about analog applications. To what extent, if any, do the considerations involving digital area-expansion applications dictate a different result? We note that we are precluded by Section 309(j) from auctioning initial DTV replacement licenses (or the accompanying construction permits), but it does not appear that a digital area-expansion application would constitute such a replacement. We seek comment, however, on whether grant of such area-expansion applications is properly viewed as merely a component of the replacement of the analog television service license, or whether it should be classified as an extension of the analog authorization outside the statutory exclusion from competitive bidding. We also invite comment as to how to resolve mutually exclusive applications where one applicant is seeking a new DTV facility, which conflicts with an area-expansion request by an initial DTV licensee.

47. The *First Auction R&O* decided that competitive bidding would not be used to resolve mutually exclusive minor change applications submitted for analog TV stations. We invite comment as to whether the same conclusion would apply in the context of DTV. The *First Auction R&O* noted that analog minor modification applications are infrequently mutually exclusive and involve less significant changes than major modifications. Thus, the Commission held that there would be greater utility in expecting parties to work together to resolve the mutual exclusivity in the rare instances in which minor modification applications become mutually exclusive.⁴⁹ NTSC minor change applications only become MX if they involve a site change and become short-spaced with another application. In the case of DTV, MX situations may arise in more cases. Use of engineering criteria to determine interference protection can result in MX situations where stations seek to increase their power or antenna height, even if they do

⁴⁵ 47 U.S.C. § 309(j)(2)(B).

⁴⁶ FCC 98-194, released August 18, 1998, *on recon.*, FCC 99-74, released April 20, 1999, *on further recon.*, FCC99-201, released August 5, 1999 ("*First Auction R&O*").

⁴⁷ *First Auction R&O*, at ¶ 14.

⁴⁸ *Id.*, quoting 47 U.S.C. § 309(j)(1).

⁴⁹ *First Auction R&O*, at ¶ 19.

not seek to change their site. With the large number of DTV applications being filed, we do expect that there will be numerous mutual exclusivities involving area-expansion applications.

48. If commenters oppose use of competitive bidding, we invite them to suggest alternative approaches to resolving mutual exclusivities. Would these alternative methods be permitted under the Balanced Budget Act? Finally, in the event we hold auctions, we propose to use the auction techniques established in the *First Auction R&O*. We invite comment on this approach.

49. Application Processing/Protection Priority. We invite comment on what processing priorities we should establish as between DTV area-expansion applications and NTSC applications and rule making petitions. We have determined and reiterated several times that the future of television is DTV. For that reason, in 1996, the Commission decided to stop accepting petitions to add new NTSC channels and applications for new NTSC stations.⁵⁰ Those pending applications for new NTSC stations that were not subject to the TV application freeze were protected by the initial DTV table of allotments.⁵¹ Applications for new NTSC stations in the areas subject to the TV freeze and rule making petitions to add new NTSC channels were not protected or otherwise accommodated in the development of the initial DTV table of allotments or subsequent amendments to that initial table. Similarly, NTSC applications for minor changes in existing or authorized stations were not protected or otherwise considered when the DTV table was developed, adopted or amended.

50. The Commission addressed the need for new NTSC station construction permit applications that sought a waiver of the TV application freeze in major markets to amend or propose a substitute channel in the DTV *Second MO&O*.⁵² At that time, we decided that those NTSC applications must protect all DTV stations, including authorized DTV stations, facilities requested in DTV station applications, DTV allotments, and rule making proposals to change or add a DTV channel allotment. A recent Public Notice opened a window for amendments or channel change proposals to be submitted for such NTSC freeze-area applications, as well as new NTSC station applications that had not been subject to the freeze, but requested an allotment in the range of channels 60 to 69 and pending petitions for rule making seeking to add an NTSC channel allotment.⁵³ In that processing Public Notice, we also clarified that rule making petitions seeking to add an NTSC channel allotment must protect all DTV stations (including allotments, applications and rule making proposals as listed above). NTSC applications for minor changes in authorized stations also must protect all such DTV stations.⁵⁴

⁵⁰ See *Sixth Further Notice of Proposed Rule Making* in MM Docket No. 87-268, 11 FCC Rcd 10968 (1996) at ¶¶ 60-62.

⁵¹ See *Order*, RM-5811, adopted July 16, 1987, Mimeo No. 4074 (released July 17, 1987), 52 FR 28346 (1987).

⁵² See *Second MO&O*, at ¶¶ 40-41.

⁵³ See Public Notice, DA 99-2605, released November 22, 1999, *Mass Media Bureau Announces Window Filing Opportunity For Certain Pending Applications and Allotment Petitions for New Analog TV Stations*.

⁵⁴ See Public Notice, released August 10, 1998, *Additional Application Processing Guidelines for Digital Television (DTV)*.

51. We have not clarified the extent to which these NTSC petitions and applications could have protection from later-filed DTV applications and at what point such protection should be afforded. It is important to specify such a priority to allow orderly processing and reasonable certainty that an NTSC applicant or petitioner's grant is valid.

52. We note that Congress recently enacted new legislation to provide for Class A TV stations. This legislation establishes the priority such stations would have with respect to DTV and NTSC stations.⁵⁵ In order to receive a Class A license, the applicant must show interference protection to:

- (i) the predicted Grade B contour (as of the date of enactment of the Community Broadcasters Protection Act of 1999, or November 1, 1999, whichever is later, or as proposed in a change application filed on or before such date) of any television station transmitting in analog format; or
- (ii)(I) the digital television service areas provided in the DTV Table of Allotments; (II) the areas protected in the Commission's digital television regulations (47 CFR 73.622(e) and (f)); (III) the digital television service areas of stations subsequently granted by the Commission prior to the filing of a class A application; and (IV) stations seeking to maximize power under the Commission's rules, if such station has complied with the notification requirements in paragraph (1)(D)....⁵⁶

This legislation would thus require Class A stations to protect: (1) TV stations "transmitting in analog format" as of the enactment date, November 29, 1999, or "change" applications filed as of that date; (2) DTV service areas provided by the DTV allotment Table, including DTV service authorized before the filing of a Class A application; and (3) DTV stations seeking to "maximize" their service areas, provided they notify the Commission by December 31, 1999, of their intent to maximize and file their maximization applications by May 1, 2000.⁵⁷

53. We invite comment as to whether a similar priority scheme should be adopted as between DTV and NTSC stations, and, if so, what the priorities should be as between DTV and NTSC applications and stations. There are a number of pending new NTSC station and NTSC minor change applications. Some of the pending new NTSC station applications were the subject of competitive

⁵⁵ Pub Law 106-113, 113 Stat. 1501 (1999) Making consolidated appropriations for the fiscal year ending September 30, 2000, and for other purposes. Community Broadcasters Protection Act of 1999, § 5008 of Title V of S. 1948, the "Intellectual Property and Communications Omnibus Reform Act of 1999.

⁵⁶ 47 U.S.C. § 336(f)(7)(A). We do not herein discuss the provisions with respect to protection of low power television stations or low power television translator stations as these are not pertinent.

⁵⁷ In the *Class A NPRM*, we invite comment as to the interpretation and implementation of this priority scheme. The *Class A NPRM*, ¶27, notes that we are inclined to include among the NTSC facilities that Class A stations must protect stations that are transmitting and stations that are authorized to construct facilities.

bidding in the Commission's broadcast auction this past fall. Should we follow an analogous priority scheme to that established in the new Class A legislation in prioritizing between DTV and NTSC applications? If so, should the reliance interest of the applicants that have participated in the auction and won change the result for these particular applicants? If we should not follow an analogous scheme, what priority scheme should be established and what, if any, cut-off protection should be established to protect new NTSC station applications from last-minute DTV applications and allow NTSC applicants to participate in auctions and plan their facilities? What processing priorities should apply between applications for minor changes in authorized NTSC stations and DTV area-expansion applications?

V. ADMINISTRATIVE MATTERS

54. *Initial Paperwork Reduction Act of 1995 Analysis.* This Notice may contain either proposed or modified information collections. As part of our continuing effort to reduce paperwork burdens, we invite the general public and the Office of Management and Budget ("OMB") to take this opportunity to comment on the information collection that might be required, as required by the Paperwork Reduction Act of 1995, Pub. L. No. 104-13. Public and agency comments are due at the same time as other comments on this Notice (i.e., May 17, 2000); OMB comments are also due May 17, 2000. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Judy Boley, Federal Communications Commission, Room C-1804, 445 12th Street, SW, Washington, DC 20554, or via the Internet to jboley@fcc.gov and to Edward C. Springer, Office of Management and Budget, Office of Information and Regulatory Affairs, 725 17th Street, N.W., Room 10236, NEOB, Washington, DC 20503 or via the Internet to Edward.Springer@omb.eop.gov.

55. *Filing of Comments and Reply Comments.* Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before May 17, 2000, and reply comments on or before June 16, 2000. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24,121 (1998).

56. Comments filed through ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment via e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.

57. Parties who choose to file by paper must file an original and four copies of each filing. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 Twelfth Street, S.W., TW-A325, Washington, D.C. 20554.

58. Parties who choose to file paper should also submit their comments on diskette. These diskettes should be addressed to: Wanda Hardy, Paralegal Specialist, Mass Media Bureau, Policy and Rules Division, Federal Communications Commission, 445 Twelfth Street, S.W., 2-C221, Washington, D.C. 20554. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible format using Word 97 or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, proceeding (including the lead docket number in this case (MM Docket No. 00-39), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy – Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, International Transcription Service, Inc., 445 Twelfth Street, S.W., CY-B402, Washington, D.C. 20554.

59. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 Twelfth Street, S.W., CY-A257, Washington, D.C. 20554. Persons with disabilities who need assistance in the FCC Reference Center may contact Bill Cline at (202) 418-0270, (202) 418-2555 TTY, or bcline@fcc.gov.

60. *Ex Parte Rules.* This proceeding will be treated as a "permit-but-disclose" proceeding subject to the "permit-but-disclose" requirements under Section 1.1206(b) of the rules. 47 C.F.R. § 1.1206(b), as revised. Ex parte presentations are permissible if disclosed in accordance with Commission rules, except during the Sunshine Agenda period when presentations, ex parte or otherwise, are generally prohibited. Persons making oral ex parte presentations are reminded that a memorandum summarizing a presentation must contain a summary of the substance of the presentation and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required. See 47 C.F.R. § 1.1206(b)(2), as revised. Additional rules pertaining to oral and written presentations are set forth in Section 1.1206(b).

61. *Initial Regulatory Flexibility Analysis.* With respect to this *Notice*, an Initial Regulatory Flexibility Analysis ("IRFA") is contained in Appendix A. As required by the Regulatory Flexibility Act, see 5 U.S.C. § 603, the Commission has prepared an IRFA of the possible economic impact on small entities of the proposals contained in this *Notice*. Written public comments are requested on the IRFA. In order to fulfill the mandate of the Contract with America Advancement Act of 1996 regarding the Final Regulatory Flexibility Analysis, we ask a number of questions in our IRFA regarding the prevalence of small businesses in the television broadcasting industry. Comments on the IRFA must be filed in accordance with the same filing deadlines as comments on the *Notice*, and must have a distinct heading designating them as a response to the IRFA. The Reference Information Center, Consumer Information Bureau, will send a copy of this *Notice*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. § 601 et seq. (1981), as amended.

62. *Additional Information.* For additional information on this proceeding, please contact Gordon Godfrey, Policy and Rules Division, Mass Media Bureau at (202) 418-2190, or Keith A. Larson, Office of the Bureau Chief, Mass Media Bureau at (202) 418-2600.

VI. ORDERING CLAUSE

63. Accordingly, IT IS ORDERED that, pursuant to the authority contained in Sections 4(i) & (j), 303(r), 307, 309, and 336 of the Communications Act of 1934 as amended, 47 C.F.R. §§ 4(i) & (j), 303(r), 307, 309, and 336, this *Notice of Proposed Rule Making* IS ADOPTED.

64. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this *Notice of Proposed Rule Making*, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas
Secretary

APPENDIX A

INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act, *see* 5 U.S.C. § 603 ("RFA"),⁵⁸ the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible economic impact on small entities by the policies and rules proposed in this *Notice of Proposed Rulemaking (Notice)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *Notice* provided above in paragraph 55. The Commission will send a copy of the *Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. *See* 5 U.S.C. § 603(a). In addition, the *Notice* and the IRFA (or summaries thereof) will be published in the Federal Register. *See id.*

1. Need for, and Objectives of, the Proposed Rules

As described in the *Notice*, the proposed rules are required to ensure a smooth transition of the nation's television system to digital television. We have specifically invited comment on: (1) whether to adopt a service replication requirement and to require enhanced service to the DTV stations' city of license; (2) whether to adopt a requirement that DTV stations elect their post-transition DTV channel by a certain date; and (3) how to resolve mutually exclusive DTV and DTV/NTSC applications.

2. Legal Basis

This *Notice* is adopted pursuant to sections 4(i) & (j), 303(r), 307, 309, and 336 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 4(i) & (j), 303(r), 307, 309, and 336.

3. Description and Estimate of the Number of Small Entities To Which the Proposed Rules Will Apply

The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.⁵⁹ The Regulatory Flexibility Act defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small business concern" under section 3 of the Small Business Act.⁶⁰ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁶¹ This action concerns TV broadcast stations.

⁵⁸ The RFA, *see* 5 U.S.C. § 601 *et. seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

⁵⁹ 5 U.S.C. § 603(b)(3).

⁶⁰ *Id.* § 601(3).

⁶¹ Small Business Act, 15 U.S.C. § 632.

to utilize the SBA definition applicable to manufacturers of Household Audio and Visual Equipment. We will again take that approach here. According to the SBA's regulations, a household audio and visual equipment manufacturer must have 750 or fewer employees in order to qualify as a small business concern.⁶⁹ Census Bureau data indicates that there are 410 U.S. firms that manufacture radio and television broadcasting and communications equipment, and that 386 of these firms have fewer than 500 employees and would be classified as small entities.⁷⁰ The remaining 24 firms have 500 or more employees; however, we are unable to determine how many of those have fewer than 750 employees and therefore, also qualify as small entities under the SBA definition. Furthermore, the Census Bureau category is very broad, and specific figures are not available as to how many of these firms are exclusive manufacturers of television equipment for consumers or how many are independently owned and operated. We conclude that there are approximately 386 small manufacturers of television equipment for consumer/household use.

4. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

Comments are sought as to whether to explicitly require DTV stations to replicate the coverage areas of their paired analog stations, whether to require enhanced signal strength to the DTV station's city of license, whether to require that broadcasters elect which of their channels will be the DTV channel after the transition at an early date, and how to resolve mutually exclusive DTV and DTV/NTSC applications. The Notice also invites comment on other issues that must be resolved in order to assure a smooth transition, including critical unresolved issues relating to tower siting, copy protection, and cable compatibility and how they affect the progress of the digital transition. With respect to the DTV transmission standard, while the Commission continues to believe that NTSC service replication is achievable by DTV operations using the 8-VSB standard, we recognize that some in the industry, including Sinclair Broadcasting Group, have raised various issues with respect to that standard. Comments are sought on the current status of the 8-VSB DTV standard. We are particularly interested in the progress being made to improve indoor DTV reception under the existing transmission standard and manufacturers' efforts to implement DTV design or chip improvements.

Some broadcasters have recommended that the Commission address over-the-air signal reception by setting receiver standards, which we understand to mean performance thresholds (like the UHF noise figure requirement), as opposed to mandatory technology specifications (like the ATSC digital standard itself). Accordingly, comment is sought first on whether we have the authority to set minimum performance levels for DTV receivers. Comment is also sought on the desirability of adopting minimum performance levels, and comments are asked to address how these requirements should be structured, including timing considerations.

5. Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered

Below, we have described various proposals (with alternatives considered) that we believe will accrue to

⁶⁹ 13 C.F.R. 121.201, (SIC) Code 3651.

⁷⁰ U.S. Small Business Administration 1995 Economic Census Industry and Enterprise Report, Table 3, SIC Code 3651 (Bureau of the Census data adapted by the Office of Advocacy of the U.S. Small Business Administration).

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⁵⁹ 5 U.S.C. § 603(b)(3).

⁶⁰ *Id.* § 601(3).

⁶¹ Small Business Act, 15 U.S.C. § 632.

their DTV channel conversion. The *Notice* invites comment as to whether we are required to impose an earlier date based on recent legislation requiring identification of 175 additional DTV channels within 18 months of the law's enactment.

To the extent the Commission may adopt performance thresholds for DTV receivers, the Commission has requested comment on timing considerations, which will enable it to take into account potential burdens that may otherwise be placed on small entity manufacturers of these receivers. In contrast, any action taken with respect to the DTV transmission standard (specifically in connection with the 8-VSB standard) will have only an indirect effect on manufacturers of television equipment designed for use by the industry. Nevertheless, the comment sought in the *Notice* is broad enough to provide the Commission with sufficient opportunity to address this issue.

6. Federal Rules that May Duplicate, Overlap, or Conflict With the Proposed Rules

None.